

A DEADLY FAITH IN FAKES:

Trademark Theft and the Global Trade in Counterfeit Automotive Components

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Abstract

Intellectual property (IP) crime remains as yet a marginal topic in sociological and criminological investigation. This neglect is due in part to the perception that such offences are 'non-serious' and/or 'victimless'. This paper sets out to challenge such assumptions by examining a particular instance of IP crime, namely the counterfeiting of dangerous goods, and in particular the counterfeiting of automotive components. It is argued that such activities, now globally widespread, carry both significant economic costs, and that they pose substantial risks to public health and safety. Some of the key drivers of this trade are analysed, along with recent developments in law, policing, crime control and technological innovation that aim to curtail the counterfeiting of these and other dangerous counterfeit products. It is argued that IP crime comprises a socially significant and sociologically challenging phenomenon, one that deserves concerted attention from those working in the sociology of crime, law, health, risk, technology and political economy.

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Introduction

Over the past decade, the challenges presented by intellectual property crimes (such as the violation of copyrights, patents and trademarks) have moved inexorably up the political, economic, and legal agenda. This heightened attention has been driven by an apparently dramatic growth of such crimes – the trade in counterfeit and fake goods is now estimated to make up anywhere between 5% and 7% of overall world trade (Brut, 1997: 7), amounting to some \$450-\$500 billion per annum (Ross, 2004; FGCCC, 2004: 1). This growth can be attributed to a range of factors, including (but not limited to): the overall expansion of global and cross-border trade (Castells, 1998; TraCCC, 2001); the emphasis upon intellectual innovation and the exploitation of intellectual property (IP) rights as key drivers of the 'post-industrial' knowledge economy (Bettig, 1996; Webster, 2003); and the development of new information and communication technologies, such as the Internet (Boyle, 1996; Castells, 2002). Issues related to intellectual property offences have also recently, albeit rather belatedly, begun to attract the attention of academic criminologists and sociologists (see, *inter alia*, Vagg and Harris, 2000; Hetzer, 2002; Wang and Zhu, 2003; Yar, 2005). However, the general criminological indifference to IP crimes mirrors in considerable part prevalent public attitudes – such violations are seen as, at worst, instances of 'victimless crime' (Anderson, 1999: 57), and thus far less serious than those offences which involve direct predation upon individuals; they may even be valorized and justified as instances of resistance to the market hegemony of large corporations. However, far from viewing such crimes as 'victimless', rights-holders point to the manifold economic and social costs of IP violations: companies lose revenues and profits, with consequences for their shareholders (as stock values are curtailed), their employees (as jobs are lost), and their customers (on to whom

the financial losses will be passed in the form of increased prices); states lose valuable tax revenues, as counterfeit goods move through informal markets where taxes and duties are seldom paid; and both public and private actors have to bear the costs of policing, crime prevention, detection and law enforcement (Vithlani, 1998: 4). Moreover, it is suggested that counterfeit goods entail direct social costs for individuals in the form of health risks. There now exists a thriving global market in counterfeit pharmaceuticals, food and drink, and cosmetics, which may be manufactured from dangerous and adulterated substances, and which have been linked to numerous cases of death and serious injury (Forzley, 2003). In this article, I explore the trade in one such form of dangerous counterfeit goods, namely the market for 'fake' automotive components. Empirically, the scope and scale of this global trade is mapped and its risks to public health are assessed; analytically, the factors contributing to and sustaining this growing trade are elucidated, indicating that wider processes of social, political and economic change inadvertently stimulate a markets in dangerous counterfeit goods. Finally, some of the available anti-counterfeiting measures are considered and assessed. Throughout, the paper is concerned to establish that IP violations can and do carry significant social harms, and as such are deserving topics for critical criminological and sociological investigation, like those offences committed *by* corporate and other large collective actors (such as the exploitation of sweatshop labour and environmental destruction) which already command attention (Sutherland, 1945; Slapper and Tombs, 1999, and most recently Alvesalo and Tombs, 2004). The paper aims to establish the trade in dangerous counterfeit goods as a significant sociological research topic, one that should engage the interest of sociologists of crime and deviance, law, health, risk, technology and political economy.

This article is organized into five sections. In the first, I briefly introduce IP law in respect of patents and trademarks, the basis upon which the trade in counterfeit components is prohibited.

In the second section, I assess the scope and scale of this trade, drawing upon a range of sources published by trade organizations, anti-counterfeiting groups, national and international law enforcement organisations. However, I also examine the not inconsiderable methodological problems associated with the compilation of such data, problems that necessitate that we treat claims about the scope and scale of the problem with some caution. Indeed, it is suggested that social construction of statistics about the prevalence and consequences of such offences ought to be viewed as an integral moment of struggles to 'moralise' the domain of IP crimes, in reaction to widespread public indifference.

In the third section, I turn to consider what is known of the public and consumer costs of this trade, focusing upon the threats to driver, passenger and pedestrian safety, as well as economic and social costs which might arise as a consequence of automotive accidents (such as insurance and provision of public health care).

In the fourth section, I analyze the factors sustaining this trade, focusing in particular upon the profit potential for illicit manufacture presented by globalisation and by the creation of economic value through trademarks and brands in a consumer- and symbolically-oriented economy.

In the fifth and final section, I examine some of the legal, law-enforcement, and technical solutions that have been proposed in order to help curtail this trade in potentially deadly 'fakes', and note the limitations apparent in current crime control efforts.

Definition: Counterfeiting, Patents, Trademarks and Intellectual Property Law

'Counterfeiting' is a term used across a wide range of legal as well as lay contexts, and settling upon a precise definition is not a straightforward matter. However, all legal and economic uses of the term have their basis in intellectual property (IP) law and protection. IP law is itself immensely complicated, spanning as it does national, regional, and international laws, treaties, conventions, and directives, as well as judicial rulings and other precedents. Moreover, as Bently and Sherman (2001) note, it is a field in radical flux, the past decade having seen far-reaching revisions in IP rights, beginning from the TRIPS (trade-related aspects of intellectual property) Agreement, which was finalised under the auspices of the WTO in 1994. While it is hopefully not necessary to revisit the long history and detailed development of IP law in the present context², a basic definition of 'intellectual property', and especially of 'patents' and 'trademarks', is necessary if we are to grasp the current legal grounds upon which the problem of 'counterfeiting' is constituted.

At its most fundamental, 'intellectual property' takes the form of so-called 'intangibles', such as ideas, inventions, signs, information and expression. Whereas laws covering 'real' property establish rights over 'tangibles', IP laws establish proprietary rights over 'original' forms of intellectual production (Bently and Sherman, 2001: 1-2; WIPO, 2001: 3). IP can take a number of recognised forms – patents, trademarks, trade secrets, industrial designs and copyrights. Patents have as their object inventions (products or process) over which the state grants the inventor rights in relation to the inventions' exploitation, such as their manufacture. Once an invention is patented, it cannot be

² For such a detailed account of both the development and current parameters of IP law, see Bently and Sherman (2001) and Letterman (2001)

exploited by any party without the prior permission of the patent holder (WIPO, 2001: 17). An automotive components may be protected by patent, provided that it has met the requisite criteria for patentability, namely that it is 'industrially applicable' (useful), new (novel), and entails an 'inventive step' (it is non-obvious) (Ibid.). A trademark, in contrast, is "any sign that individualises the goods of a given enterprise and distinguishes them from the goods of its competitors." (Ibid.: 68). Trademarks indicate the source of the product, such that the consumer can distinguish it from the products of other manufacturers. Words (such as slogans and company names), drawings and symbols (such as logos), and audible signs (such as music) can all function as trademarks (Ibid.: 70). The recognised holder of a trademark enjoys proprietary rights over its use, and other parties are prohibited from using the holder's mark to (mis)identify their own products (Bently and Sherman, 2001: 900-901). In the area of component counterfeiting, the majority of IP violations comprise breaches of trademark, wherein component manufacturers or retailers misrepresents their goods as originating from the legitimate holder e.g. the manufacturer of the counterfeit may stamp or package the parts with the name or logo of a recognised producer (such as General Motors, Ford or Mercedes), thereby misleading the consumer as to their true provenance.

The Scope and Scale of the Counterfeit Parts Trade

The trade in counterfeit components involves the production of a wide array of items, including:

- Oil and air filters
- Wheels
- Engine hoods
- Spark plugs
- Anti-roll bars
- Fenders/Bumpers
- Brake discs and pads
- Windscreens
- Fan belts
- Distributor caps
- Shock absorbers
- Steering rods and pins
- Bearings
- Coolants

The trade in such items is now organised on a global scale, with known producers in countries such as China, Taiwan, India, Turkey, Singapore, Iran, Latin America, Belgium, Denmark, France, Spain, Italy, Germany the UK, and Portugal (Vithlani, 1998: 19; Brut, 1999: 12). Products are distributed through extensive networks of importers-exporters, in countries such as Belgium, Denmark, Italy, the Netherlands, Spain, Argentina and the Czech Republic (Ibid.). Recent years have also seen the development

of more direct business-to-customer (B2C) retail via catalogues and the Internet, with items being delivered through postal services (UNIFAB, 2001), thereby diminishing the possibilities for large-scale seizures in the course of border customs inspections.

Recent data suggests that this trade in counterfeit automotive components constitutes a large and rapidly expanding market. A recent survey by the Motor and Equipment Manufacturers Association (MEMA) suggested that, globally, the automotive industry loses \$12 billion per annum as a result of counterfeiting, resulting in the loss of 750,000 jobs (FGCCC, 2004: 4). These figures are endorsed by the US Federal Trade Commission, which indicates that 25% of these losses are incurred by US businesses (Federal Mogul, 2004). The Institute of Trading Standards (ITS) claims that in the UK, the market in counterfeit parts grew from £300 million in 1994 to £3 billion in 1999 (BBC, 1999). In France, the Peugeot-Citroen group estimated that some 50% of the spare and replacement parts purchased for its automobiles are counterfeit, amounting to lost revenues in excess of 13 billion francs per annum (Brut, 1999: 11). In the Gulf States, the counterfeit car parts industry is estimated to be worth some \$150-200 million annually. Such claims about the scale of the trade are lent support from instances of customs and other seizures. In 2000, Chinese authorities (following complaints from foreign automobile manufacturers) undertook a series of raids on 248 markets, resulting in the confiscation of 30,000 counterfeit auto parts (bearing brand names such as Toyota, Nissa and Mercedes Benz), with an estimated retail value of \$1.4 million (CIIC, 2000). In 2003, US parts manufacturer Federal-Mogul collaborated with Chinese authorities in investigating the manufacture of counterfeit 'Champion' brand spark plugs, resulting in the seizure of more than 600,000 parts, along with counterfeit packaging (Federal-Mogol,

2004). Such figures indicate, albeit impressionistically, that the trade in counterfeit parts constitutes a major economic market in its own right.

However, we must at this point consider a number of caveats indicating that the available data on parts counterfeiting may in turns either under- or over-estimate its true scope and scale. Firstly, it should be noted that extrapolation from figures for seizures by customs and law enforcement, a common practice, may be highly unreliable (CEBR, 2002: 25, 36-37). At a time when there is increasing emphasis upon dismantling border control to stimulate global free trade, and a large increase in such cross-border flows, customs organizations are able to inspect only a small percentage of all goods (for example, in 1997 U.S. customs inspected only 3% of shipments entering the country – Vithlani, 1998: 26). Similarly, enforcement of IP law has traditional been a low priority for law enforcement agencies and, relative to other areas of crime control, attracts minimal public resources (Vagg and Harris, 2000: 109-111). Thus it is likely that the greatest part of the trade in counterfeits will go undetected, suggesting that there may be gross under-estimation of its overall levels. Moreover, if overall figures are extrapolated from seizures, they will be contingent upon the changing emphasis on enforcement over time – an apparent dramatic rise in seizures may not necessarily be indicative of an upturn in actual counterfeiting activity, but rather result from the allocation of greater resources to IP enforcement as a result of political and other pressures. Conversely, however, we must also note that greatest part of available data on parts counterfeiting does not emanate from independent sources, but from interested parties (rights holders). As the CEBR (2002: 29) notes, there is ‘nothing preventing the companies from overstating their losses through counterfeiting for lobbying purposes’. In other words, overstating losses may be

strategically mobilised to pressure governments into tightening IP laws, laying down more stringent penalties for convicted offenders, and allocating greater resources to enforcement activities. In such a situation, we cannot rule out the possibility that the uses of statistics as a political tool may encourage rights-holder to inflate their estimates of the financial damage that is caused by the counterfeiting trade. However, this is not to suggest that such data should be simply discounted. Rather, the attempts by corporate and law enforcement agents to construct compelling and dramatic evidence about IP violations should be seen as part of a process in which the moral meanings of crime are negotiated; by presenting such offences as 'serious' and 'extensive', rather than 'harmless' and 'marginal', rights-holders and others attempt to overcome public indifference, and persuade those who formulate priorities for criminal justice that IP violations are deserving of concerted attention. From a methodologically 'realist' perspective (Young, 2003: 320-1), it would of course be desirable to have available data originating from sources somewhat less interest-bound than the automotive industry. Yet in the absence of any independent, large-scale study of component counterfeiting we are compelled to mobilise such data as is available, but with the awareness that the statistics should be treated as reflexively available for questioning as to the process through which they have come to be constructed.

Social Costs and Health Risks of the Counterfeit Parts Trade

One of the most compelling arguments mobilised by rights-holders against the counterfeit parts trade focuses upon the health risks they pose for drivers, passengers, and pedestrians alike. The examination of parts obtained through seizure paints a worrying picture. Counterfeit components are often manufactured from sub-standard materials, which do not conform to the tolerances required for their safe use in automobiles; they are not subject to safety testing, either by manufacturers or independent authorities (Brut, 1999: 10-11; Anderson, 1999: 58; GM Goodwrench, 2004). Consequently, such components are liable to catastrophic failure, especially when vehicles are driven at speed. Documented instances of such liability to failure include: brake pads made from compressed grass, wood chips and cardboard, which increase braking distances and catch fire following intensive use (Brut, 1999: 11; BBC, 1999, Ross, 2004); bonnets that fail to crumple upon impact, and penetrate the passenger compartment (Brut, 1999: 11; Automechanika, 2004); fake oil filters that cause sudden engine failure (Automechanika, 2004); and bumpers that have only a tenth of the required resistance to pressure, and shatter dangerously upon impact (Brut, 1999: 11). Such components have been linked to a number of fatal accidents: in Saudi Arabia, a mother and child were recently killed due to the failure of counterfeit brakes (Ross, 2004); similarly, in 1987, seven children died when their school bus crashed, attributed to brakes manufactured from sawdust (IAAC, 2003: 7); a similar case was recorded in Canada, when fifteen were killed when a bus fitted with counterfeit brake linings careered over a cliff (Carrutu International: 1996: 3). These and other instances of fatal and seriously injurious accidents give strength to automotive industry claims that counterfeit components present a serious threat to public health and safety.

According to the World Health Organisation, an estimated 1.2 million people are killed annually in road crashes, and up to 50 million are injured (WHO, 2004: 1). However, assessing the proportion of these fatalities and injuries that are a consequence of the use of counterfeit components is a difficult task. There is no established practice of forensic and technical examination of vehicles involved in serious accidents, through which the role of counterfeit components could be established. This stands in contrast to air accident investigation, where civil aviation authorities are required to investigate all serious incidents. As a result, counterfeit aircraft components have been linked to 174 crashes and accidents in the US alone between 1973 and 1996 (ACG, 2001: 1). The number of accidents and injuries with respect to automobiles remains largely unknown. However, one former motor industry insider reports that automobile manufacturers, on the basis of their own intelligence and investigation, attribute some 3% of fatal accidents to defective componentsⁱ. If this figure is accurate, then, following the WHO statistics, defective components are responsible for 36,000 deaths and 1.5 million injuries every year. It is plausible (though untested) that a significant proportion of these defective parts are of counterfeit origin, given what has already been established regarding their propensity to fail. Moreover we must consider the economic costs caused by road traffic accidents (such as the cost to emergency services, loss of income for the injured or the families of those killed, the provision of health care, the increase of insurance premiums, the loss of income taxes and the provision of social benefit for those no longer able to work as a result of their injuries, and so on). The WHO estimates the global per annum cost of road traffic accidents to be \$518 billion; again, if we apply the 3% figure, this means that defective components carry an economic cost of some \$15.5 billion (over and

above the \$12 billion losses to intellectual property rights holder through lost revenues). Again, we may reasonably suppose that a considerable proportion of such items are of counterfeit origin. In addition to incidents resulting in fatalities, we must add non-fatal but nevertheless serious accidents. Moreover, apart from those accidents *caused* by counterfeit component failure, we must also consider those that might arise from other factors (such as driver error or adverse driving conditions), but in which the presence of counterfeit components may nevertheless cause otherwise avoidable death and injury. Thus serious harms might result from the presence of counterfeit items such as windscreens that shatter, bonnets that fail to crumple and so absorb the shock of impact, anti-roll bars that break, bumpers that fragment, and so on. The presence of such defective components in automobiles that are involved in crashes, whatever the primary causes of those incidents might be, will almost inevitably result in injury to drivers, passengers and pedestrians.

Factors Contributing to the Growth of the Counterfeit Parts Trade

The presence and growth of the trade in counterfeit components can be viewed as a consequence of multiple social, economic and political developments, which are explored below.

Firstly, we must consider the rapid global expansion of automobile use. There are now an estimated 500 million cars on the world's roads, a figure expected to double by 2015 (Urry, 2000: 2). This growth inevitably entails an expanding market for replacement spare parts. Consequently, even if the *proportion* of all parts which are counterfeit were to remain constant, the *gross number* of such parts in use would still expand rapidly as the number of cars on the road increases. Moreover, we must note that the greatest increases in motor vehicle numbers have occurred in low and middle income countries undergoing rapid economic development – studies indicate that expansion of motor vehicle use is closely correlated with rising per capita GDP (WHO, 2004: 19). Thus, for example, in China the number of motor vehicles quadrupled between 1990 and 2002, and similarly in Thailand there was an almost four-fold increase over the decade between 1987 and 1997 (Ibid.,). This expansion in developing countries can be seen to take place in economic conditions favourable to the marketing of counterfeit rather than legitimate parts. Those in low and middle income countries have access to less financial resources than those in the advanced industrial world, and may thus be unable/unwilling to purchase components from legitimate manufacturers (who retain a virtual monopoly over authorised parts by controlling supply through networks of authorised dealers). Counterfeit parts can be purchased at 50% of the price of legitimate components (Automechanika, 2004), thus stimulating demand and creating a ready market for

counterfeit manufacturers, suppliers and retailers (studies indicate that economic motivations rank high amongst consumer choices to purchase counterfeit goods, and that the price differentials between legitimate and illegitimate goods play a significant role in motivating consumers to choose counterfeits – see Tom et al, 1999).

Secondly, there are a number of factors that make automotive components an increasingly lucrative area for counterfeiters to exploit. One consideration is that the profit potential is increased due to 'excessive' pricing of parts by legitimate rights-holders, who can take advantage of their monopolistic control over authorised supply chains (a practice that has come under attack for alleged contravention EU competition laws – Brut, 1999: 12). Over-pricing thus creates potential for hyper-profits for counterfeiters. Moreover, counterfeiters entertain significantly lower production costs than their legitimate counterparts, since they incur no costs from research and development, testing, and quality assurance, and typically produce components from cheaper materials; also, they tend to specialize in the production of only those most common components which are in high demand, unlike legitimate manufacturers who have to bear the additional costs of producing many thousands of parts which are seldom replaced (Ibid.: 11). A further factor to be considered is the ready and cheap availability of new technologies such as desktop publishing (DTP) suites and photo quality printers. These enable counterfeiters to more successfully replicate the packaging of legitimate components, making them easier to 'pass off' as genuine and more difficult to detect by enforcement agencies. Finally, we must also note the impact of economic globalisation. As already noted, recent decades have seen the dismantling of trade barriers and border controls to encourage global free trade, and the formation of regional free trade blocs such as ASEAN, NAFTA,

MERCOSUR and the EU. As cross-border flow increase, and controls decrease, this maximises opportunities for counterfeiters to deliver their products to lucrative markets with a reduced risk of major losses through the confiscation of shipments (on the impact of changing regimes of border control on the trade in counterfeits, see Robinson, 1999: 81-2).

A third and final factor to be considered is the increasing economic value derived from brands and branding (Lash and Urry, 1994: 15). Brands have come to constitute major economic assets of many companies, and comprise a significant proportion of their market valuation. A brand entails the creation of a unique identity for goods, readily recognisable by consumers. Trademarks (including the names of reputable manufacturers) offer legal protection to brand owners, ensuring that they retain proprietorial rights and controls over the use of brand names. Companies invest substantial resources in building brand identity and consumer preference, stressing in particular issues of *quality* and *trust*, of which the brand is promoted as guarantor (Gieske, 2004: 7). A reputable brand is thus held to denote that a product is reliable, performs well, and poses no risk to health and safety (Hilton, 2004: 6). Consumers are willing to pay a premium for branded goods, often preferring them to their cheaper, generic, non-branded equivalents because of their perceived quality (Eagle and Kitchen, 2000: 94). This emphasis upon brand, and its impact on consumer choices, unintentionally offers lucrative opportunities for counterfeiters. By 'hi-jacking' the brand of another manufacturer, and 'passing off' their own products as instances of a valued and trusted brand, they exploit the 'equity' of the brand. The improperly appropriated brand identification enables the counterfeiter to sell their own products at premium prices that

the consumer normally reserves for brands in which they place a special value or trust. Moreover, counterfeiters are able to 'free ride' on the considerable financial investments that a brand's owners invest in building its equity, through for example advertising and promotion. Hence a double benefit can be reaped by counterfeiters, enabling them to minimise costs and maximise the retail value of their products, thereby ensuring a large profit potential.

Curtailing The Trade: Legal, Political-Economic, Enforcement and Technological Solutions

In this final section, I consider some of the measures that have emerged for tackling the trade in dangerous counterfeit goods such as automotive components.

The first level at which action might be taken is that of legal innovation in the area of IP and trademark law, at both the domestic and international level. Recent decades have seen an on-going process of consolidation in IP rights and criminalisation of IP violations, driven by concerted lobbying from rights-holders (Drahos and Braithwaite, 2002). At the national level, we can note for example, the introduction in the US of the Anti-Counterfeiting Consumer Protection Act (1996), which enhanced officials' powers to seize and destroy counterfeit products, as well as increasing plaintiff's rights to claim statutory damages (Joffe and Sigars, 1996: 1-3). Similarly, the Anti-Counterfeiting Act (1984) made provision for penalties of up to \$250,000 in fines and up to 5 years imprisonment for convicted counterfeiters (USDOJ, 1997). Meanwhile, the UK Trade Marks Act (1994) makes provision for a maximum penalty of 10 years imprisonment and/or an unlimited fine for those found guilty of making unauthorised use of trademarks in relations to good (HMSO, 2000). At the international level, the TRIPS (trade-related aspects of intellectual property) Agreement, finalised under the auspices of the WTO in 1994, makes it incumbent upon all member states to offer adequate legal protections to rights holder, including the mandatory requirement that they make provision for confiscation, injunctions, and monetary damages. The years following TRIPS have seen an international consolidation and moves towards harmonisation of trademark protections intended to target counterfeiters.

The second level at which action might be taken is that of the political organisation of economic (especially international trade) relations. One of the landmark pieces of national legislation in this regard has been the 1984 amendment of the US Trade Act. This legislation linked the international protection of US intellectual property rights with American bilateral trade relations. It made provision for the 'Special 301' process, which enables the US administration to initiate trade sanctions against countries deemed to be providing insufficient legal protection to US rights-holders in their own territories. The Act institutionalised a process wherein the office of the United States Trade Representative (USTR) is charged with monitoring levels of IP violations in foreign territories, and with producing a 'watch list' in which 'problem' countries are identified. 'Problem' countries are issued warnings to curb levels of violations such as counterfeiting. If the response is deemed insufficiently vigorous, countries are elevated to 'priority status' – what Drahos and Braithwaite 2002: 90) call 'trade's death row' – opening the way for a range of trade-related sanctions (Wild, 2004: 2). Between 1984 and 2002, the U.S. initiated the 'Special 301' process against no less than 44 countries, mostly in the developing world (Drahos, 2001: 50-51). Thus the organisation of bilateral trade relations becomes a potent coercive instrument for ensuring that counterfeiting activities are suppressed worldwide.

At a third level, counterfeiting is being tackled through intensified enforcement activities. As already noted, law enforcement in the area of intellectual property crimes has traditionally enjoyed a low priority, and has typically been fragmented, piecemeal, and chronically under-resourced (Anderson, 1999: 56; Vagg and Harris, 2000: 109-112). This

may be attributed to a range of factors, including the public concern and political emphasis on more visibly 'harmful' offences, such as 'street crimes' and violent crime; the relatively 'invisible' nature of IP crimes and the indirect nature of the harms they generate (Davis et al, 1999); difficulties in policing and intelligence gathering; and the reluctance of public prosecutors to involve themselves in a complex and specialised domain of law. The situation is particularly acute in developing countries where the lack of resources available for law enforcement relegates IP crimes to the bottom of the priority list, if it features at all. This pattern is consonant with the relatively weak effort directed toward tackling economic crime more generally (Snider, 1993). However, recent years have seen the emergence of industry-financed 'anti-counterfeiting' organisations whose *raison d'être* combines research, intelligence gathering, policing, and lobbying activities. The past two decades have seen the creation of the Counterfeiting Intelligence Bureau, the International Intellectual Property Alliance, the International Anti-Counterfeiting Coalition, the Alliance Against Counterfeiting and Piracy, the Coalition for Intellectual Property Rights and the Anti-Counterfeiting Group, to name but a few. Such organisations purport to 'lift the burden of investigation from law enforcement agencies' (AACP, 2002: 2) by engaging in a range of increasingly intensive policing activities. Where public agencies have been reluctant to invest time and resources in tackling IP violations, industrial and commercial interests have 'filled the void'. In addition to intelligence gathering and 'undercover operations', they have attempted to bring I.P. crime into the criminal justice mainstream through, for example, the appointment of specialist 'liaison' personnel to 'assist and advise' responsible agencies (police, customs, trading standards) in the detection and prosecution of counterfeiting. The development of such initiatives can be viewed as part of a more general trend in

which the hierarchical provision of crime control by a central state is increasingly supplemented by a *network of governance* involving an array of private as well as public actors (Loader and Sparks, 2002: 84-91; Rhodes, 1997; Bowling and Foster, 2002: 981-2). However, such multi-actor networks may experience 'governance failure' (Jessop, 1999: 13-14), arising from conflicts such as inter-agency competition rather than cooperation, conflicting agendas and interests, and absence of effective coordination and communication in organising activities aimed toward achieving common crime control goals.

At a fourth level, we see increasing recourse to technological solutions to inhibit and/or detect counterfeiting. As the quality of counterfeit packaging has improved, detecting unauthorised copies has become more difficult. This has led to the development of a wide array of product identification and brand protection technologies which enable legitimate products to be more readily distinguished, and which are harder for counterfeiters to reproduce (Bosworth and Yang, 2003: 21-22). These include:

- RFID (radio frequency identification) comprising of tiny microchips, encoded with product information, than can be fitted to the item;
- Bidimensional bar coding, which enables products to carry 10 to 30 times the amount of information on a traditional bar code;
- Holograms;
- Ultraviolet inks, invisible to the naked eye;
- Chemical protection systems, such as DNA coding;
- Information-encoded micro-crystals and micro-particles (Tiprus, 2004: 33)

Such technologies are increasingly popular as rights-holder attempt to distinguish their products from illegitimate copies. However, their implementation may have undesirable drawbacks, insofar as they may be costly for manufacturers (Strassner and Fleisch, 2003: 10) and so significantly increase unit production costs, which will be passed on to consumers. As a consequence, the price differential between legitimate and illegitimate products may further increase, resulting in unintended incentives for consumers to choose counterfeit goods. Moreover, technological solutions may only offer a temporary respite, as (to judge by past experience) counterfeiters have proven adept at finding means to circumvent anti-counterfeiting and IP protection mechanism (for examples from the area of copyright protection technologies, see Rassool, 2003: 5-6; also Vaidhyathan, 2003: 176-7). As one legal specialist in counterfeiting cases opined: “any gizmo or gadget that they invent to stop counterfeiting will be beaten by counterfeiters...it’s a pipe dream that technology is going to stop the counterfeiting” (Turkewitz, cited in Young 2004: 1984). These limitations thus redirect our attention to those social, political and economic conditions in which counterfeiting flourishes.

Conclusions

Intellectual property crime and its consequences remains at present a relatively neglected research area in academic sociology and criminology. Where studies have been undertaken, they tend to focus upon the area of copyright theft (such as media and software piracy) (see for example, Wang and Zhou, 2003; McCourt and Burkart, 2003; Yar, 2005). The trade in dangerous counterfeit goods has, in contrast, been thus far neglected. In this article I have attempted to redress this imbalance, examining the growing global trade in counterfeit automotive components. I have suggested that this trade represents not inconsiderable public health risks, in addition to incurring extensive economic costs. Further, I have sought to situate the growth of this trade in the context of wider processes of social, political and economic change, such as the rapid growth in automobile use (especially in the developing world), pressures toward the globalisation of economic activity and the easing of border controls, and the generation of economic value through the exploitation of brands and trademarks. Finally, I have considered a range of on-going responses to the counterfeiting problem that are apparent in the areas of legislation, trade relations, law enforcement and technological crime control. The developments explored in this article indicate that the trade in dangerous counterfeit goods deserves attention from scholars working in a wide range of areas, such as the sociology of health, technology, risk, law, crime, and political economy. At a more general level, it suggests that intellectual property crimes deserve considerably greater attention than sociologists of crime and deviance have heretofore apportioned them. The next step must be to develop a concerted research programme into the social organisation of counterfeiting activities, of the political-economic practices and processes that sustain it, and of the viability and limitations of current attempts to control it. It is only through

the systematic study of the emergence, causes, and consequences of intellectual property violations that the development of socially sensitive strategies for tackling such dangerous activities might be better formulated.

Acknowledgements

My thanks to Dr Rodanthi Tzanelli and Dr Balihar Sanghera, for providing useful comments on an earlier draft of this article. The usual caveat nonetheless applies, and all errors and omissions are the sole responsibility of the author alone.

References

Alvesalo, A. and Tombs, S. (2004) 'Economic Crime Control in Finland', *Sociology*, 38(1): 165-174

Anderson, J. (1999) "The Campaign Against Dangerous Counterfeit Goods", in R.E. Kendall (ed) *International Criminal Police Review: Special Issue on Counterfeiting*, pp. 56-59. Lyon: ICPO/Interpol.

AACP (Alliance Against Counterfeiting and Piracy) (2002) *Proving the Connection: links between intellectual property theft and organised crime*. London: AACP.

ACG (Anti-Counterfeiting Group) (2001) 'New Report Published On World Anti-Counterfeiting Day Highlights The Dangers of Fake Aircraft Parts' at <http://www.acg.com/archive27.PDF>

Automechanika (2004) 'Fake Car Parts Kill – Industry Warns Against Counterfeit Parts', at http://www.automechaniagulf.com/EPOC_PR.Daytwo.pdf

Bently, L. and Sherman, B. (2001) *Intellectual Property Law*. Oxford: Oxford U.P.

Betting, R. (1996) *Copyright Culture: The Political Economy of Intellectual Property*. Boulder: Westview Press.

Bosworth, D. and Yang, D. (2003) 'The Economics and Management of Global

Counterfeiting', paper presented at the 6th World Congress on the Management of Intellectual Capital and Innovation ,January 15 - 17, 2003, Hamilton, Ontario, Canada

Boyle, J. (1996) *Shamans, Software & Spleens: Law and the Construction of the Information Society*. Cambridge, Mass: Harvard U.P.

Bowling, B. and Foster, J. (2002) "Policing and the Police", M. Maguire, R. Morgan and R. Reiner (eds) *The Oxford Handbook of Criminology*, 3rd edition. Oxford: Oxford U.P.

Brut, J-P. (1999) 'Car Parts Counterfeiting', in R.E. Kendall (ed) *International Criminal Police Review: Special Issue on Counterfeiting*, pp. 7-13. Lyon: ICPO/Interpol.

Carrutu International (1996) *Product Counterfeiting – Protecting Your Good Name*. London: Carrutu International

Castells, M. (1998) *The Information Age: Economy, Society and Culture: vol.3 – End of Millenium*. Oxford: Blackwell.

Castells, M. (2002). *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press

CEBR (Centre for Economics and Business Research) (2002) *Counting Counterfeits: defining a Method to Collect, Analyse and compare Data on Counterfeiting and Piracy in the Single Market*, final report for the European Commission Directorate-General Single

Market. London: CEBR

Davies, P., Francis, P. and Jupp V.R. (eds) (1999) *Invisible Crimes: Their Victims and Their Regulation*. London: Macmillan.

Drahos, P. (2001) *Developing Countries and International Intellectual Property Standard-Setting*, Commission on Intellectual Property Rights Study Paper 8. London: IPRC.

Drahos, P. with Braithwaite, J. (2002) *Information Feudalism: Who Owns the Knowledge Economy?*. London: Earthscan.

Eagle, L. and Kitchen, P. (2000) 'Building Brands or Bolstering Egos? A Comparative Review of the Impact and Measurement of Advertising on Brand Equity', *Journal of Marketing Communications*, 6: 91-106

Forzley, M. (2003) *Counterfeit Goods and the Public's Health and Safety*. Washington: International Intellectual Property Institute.

Gieske, C. (2004) 'The Economic Importance of Brands – Seven Reasons Why Brands Matter', *British Brands*, Spring 2004: 7-8

GMGoodrench (2004) "Counterfeit Parts", at <http://www.gmgoodwrench.com/PartsAccessories/CounterfeitParts.html>

Hetzer, W. (2002) 'Godfathers and Pirates: Counterfeiting and Organized Crime', *European Journal of Crime, Criminal Law and Criminal Justice* 10 (4): 303-320.

Hilton, S. (2004) "The Social Contribution of Brands", *British Brands*, Spring 2004: 5-6

HMSO (2000) 'Trade Marks Act 1994', Chapter 26, Section 92, at http://www.hmso.gov.uk/acts/acts1994/Ukpga_19940026_en_4.htm#mdiv92

IACC (International Anti-Counterfeiting Coalition) (2003) *White Paper: International/Global Intellectual Property Theft: Links to Terrorism and Terrorist Organizations*. Washington: IACC

Jesop, B. (1999) 'The Governance of Complexity and the Complexity of Governance: Preliminary Remarks on some Problems and Limits of Economic Guidance', at <http://www.comp.lancs.ac.uk/sociology/papers/jessop-governance-of-complexity.pdf>

Joffe, E. and Sigars, J. (1996) 'Anti Counterfeiting Consumer Protection Act of 1996 Broadens Importer Disclosure Requirements for Trademarked Goods and Expands U.S. Customs Service Remedies Against Counterfeit Goods', *International Law Quarterly*, 15, 1: 1-3

Lash, S. and Urry, J. (1994) *Economies of Signs and Space*. London: Sage

Loader, I. And Sparks, R. (2002) “Contemporary Landscapes of Crime, Order and Control: Governance, Risk and Globalization”, in M. Maguire, R. Morgan and R. Reiner (eds) *The Oxford Handbook of Criminology*, 3rd edition. Oxford: Oxford U.P.

McCourt, T. and Burkart, P (2003) ‘When creators, corporations and consumers collide: Napster and the development of on-line music distribution’, *Media, Culture and Society* 25 (3): 333-350.

Rassool, R.P. (2003) ‘Antipiracy – Trends and Technology (A Report from the Front)’, at <http://www.broadcastpapers.com/asset/IBCWidevineAntipiracy.pdf>

Ross, S. (2004) ‘Parts Counterfeiting’, *Aftermarket Buisness*, 1 October, at: <http://www.aftermarketbusiness.com/International/Globalaftermarketbusiness/article/articleDetail.jsp?id=125346>

Slapper, G. and Tombs, S. (1999) *Corporate Crime*. London: Longman

Snider, L. (1993) *Bad Business: Corporate Crime in Canada*. Scarborough: Nelson

Strassner, M. and Fleisch, E. (2003) *M-LAB: The Promise of Auto ID in the Automotive Industry*. Cambridge MA: MIT

Sutherland, E. (1945) ‘Is “White Collar Crime” Crime?’, *American Sociological Review*, 10: 132-9

Tom, G., Garibalbi, B., Zeng, Y., and Pilcher, J. (1999) 'Consumer Demand for Counterfeit Goods', *Psychology and Marketing* 15 (5): 405-421

TraCCC (Transnational Crime and Corruption Centre) (2001) *Transnational Crime, Corruption and Information Technology*. Washington: TraCCC.

Tiprus, D. (2004) 'Using Technology to Combat the Counterfeit Trade', *World Customs Organization News*, 45, October: 33, at http://www.wcoomd.org/ie/En/Magazine/omd_actu_45_UK.pdf

UNIFAB (Union Des Fabricants) (2001) "Counterfeit goods for sale in China by catalogue and over the Internet", at http://www.unifab.com/uk/index.php?page=04_DPI

Urry, J. (2000) 'Inhabiting the Car', at <http://www.comp.lancs.ac.uk/sociology/papers/Urry-Inhabiting-the-Car.pdf>

USDOJ (US Department of Justice) (1997) 'Federal Prosecution of Violations of Intellectual Property Rights', at http://www.usdoj.gov/criminal/cybercrime/intell_prop_rts/SectIV.htm

Vagg, J. and Harris, J. (2000) 'False Profits: Why Product Counterfeiting is Increasing', *European Journal on Criminal Policy and Research*, 8: 107-115

Vaidhyanathan, S. (2003) *Copyrights and Copywrongs: The Rise of Intellectual Property and How it Threatens Creativity*. New York: NYU Press.

Vithlani, H. (1998) *The Economic Impact of Counterfeiting* (Paris: OECD)

Webster, F. (2003). *Theories of the Information Society*, 2nd Edition. London: Routledge

Wang, S. and Zhu, J.H. (2003) 'Mapping Film Piracy in China', *Theory, Culture and Society* 20 (4): 97-125

WHO (World Health Organization) (2004) *World Report on Road Traffic Injury and Prevention: Summary*. Geneva: World Health Organization Publications

Wild, J. (2004) 'Governments Increase Anti-Counterfeiting Initiatives', at <http://www.anti-counterfeitcongress.org/wco2004/documents/governments1.pdf>

WIPO (World Intellectual Property Organization) (2001) *WIPO Intellectual Property Handbook: Policy, Law and Use*, WIPO publication no. 489(E). Geneva: WIPO.

Yar, M (2005) 'The Epidemic of Movie 'Piracy': Crime-Wave or Social Construction?', *Media, Culture & Society*, forthcoming

Young, D. (2004) 'Counterfeit Drugs Lawsuit Points Finger at Wholesaler', *American Journal of Health System Pharmacy*, 61(19): 1978-1984

Young, J. (2003) 'The Need For a Radical Realism', in E. McLaughlin, J. Muncie and G. Hughes (eds) *Criminological Perspectives: Essential Readings*, Second Edition, pp. 316-327. London: Sage
